Public Safety
Issues for 2019 Session

Annual Meeting
November 16, 2018

Major Public Safety Budget and Policy Issues Exist for 2019 Session

- Current public safety GF funding requests for FY 2019 and 2020 total $265.5 million.

Agency Area	Description of Selected Major Requests	GF $ in millions
Virginia State Police (VSP) STARS	Replace end of life equipment for Statewide Agencies Radio System	$132.4
Department of Corrections (DOC)	Healthcare-related initiatives, salary actions, opioid and substance abuse programs, community residential housing	$93.3
Department of Criminal Justice Services	School safety, Mental Health in Jail Pilot Program	$19.3
Department of Forensic Science (DFS)	Controlled substances testing, equipment, laboratory supplies, IT staff	$4.7
Department of Emergency Management (VDEM)	Four-year plan to stockpile shelter supplies, and stand up permanent special operations teams and emergency support teams. Additional $5 million GF is requested to address APA findings of budget shortfall.	$11.7

DOC Requests $45.2 million for Inmate Healthcare Activities; JLARC Recommendations Could Lead to Cost-Savings

- JLARC has recently studied DOC's healthcare costs and has made findings and recommendations.

  - **DOC spending is in line with other states; however, growing 2x faster than national healthcare spending and Medicaid.**

    - Contracting brings predictability in short-term, but costs are eventually incurred in the long-term as the contractor renegotiates rates based on actual costs.

  - **DOC pays higher rates for healthcare than Medicare and Medicaid, and pays more for certain prescription drugs.**

  - **Inconsistent staffing, record keeping and monitoring of contracts poses legal and financial risk.**

  - **Early release for inmates with complex long-term conditions could reduce DOC costs.**

JLARC Recommendations Include:
Direct pilot project to pay providers Medicare rates for physician and outpatient services.
Direct DOC, VCU Health, and UVA Health to implement plan to access lower 340B prices for inmates requiring high cost drugs. Direct DOC and VCU Health to conduct pilot clinical pharmacy program.
Direct pilot project for a teaching hospital to take over providing healthcare for at least one DOC facility.
Modify contracts to incentivize stable and adequate staffing, including financial sanctions. Implement health administrator peer review program.
VITA should provide necessary assistance to DOC in electronic health records vendor selection.
Improved evaluation of contracts based on specific metrics. Implement risk-based monitoring.

Additional Funding Requested to Address DFS Controlled Substances Backlog of More than 13,000 Cases

- At the end of FY 2018, the Controlled Substances case backlog was 13,375 and the average case turnaround time was 131 days.

  - Court cases are delayed until testing is completed.

  - Case submissions grew 10% per year in 2016 and 2017, and the same trend was expected for 2018.

    - Meanwhile, cases are increasingly complex as new combinations of drugs are submitted; increased safety measures are required for laboratory staff.

- $3.3 million GF is requested to support 12 additional scientists, four wage personnel, equipment, and outsourcing of certain cases to address the backlog and improve turnaround times.

  - Administrative action in August 2018 moved $1.7 million that was budgeted for positions in FY 2020 into 2019 to hire 6 new positions. Therefore, funding is <u>required</u> in the second year for 12 positions to avoid layoffs.

Virginia State Police
Statewide Agencies Radio System (STARS) Equipment Replacement
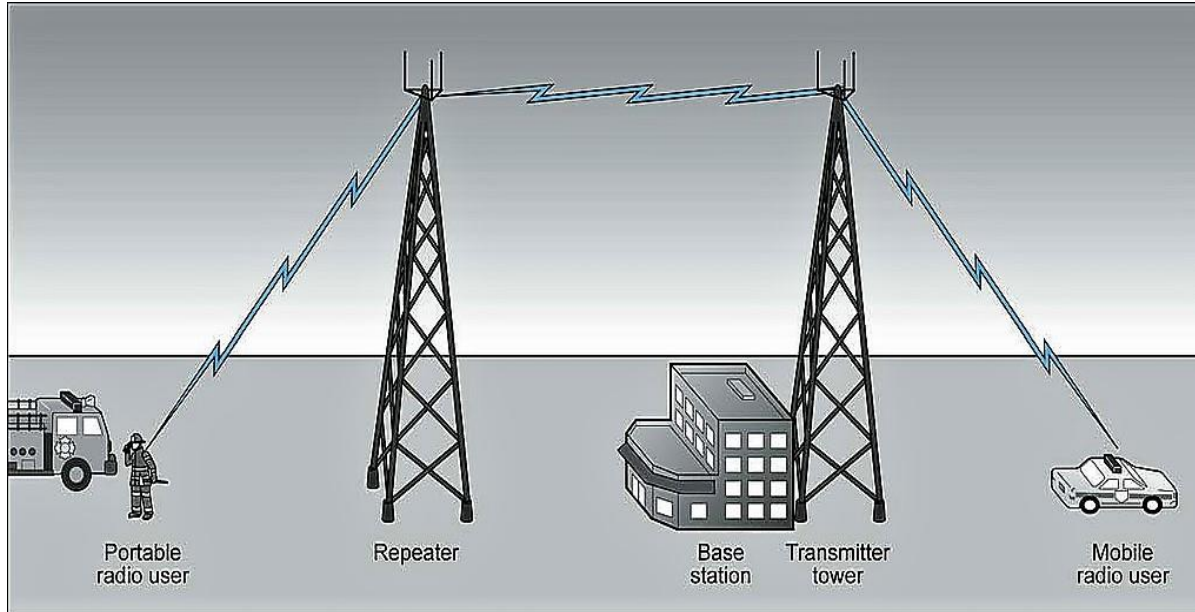
STARS Equipment Replacement

- What is STARS?

- Funding History and Current Needs

- Financing and Procurement

- Interoperability Considerations

- Options for 2019 and Beyond

What is STARS?

- Statewide Agencies Radio System (STARS) is a multi-channel digital voice Land Mobile Radio (LMR) network owned by the Department of State Police (VSP) with 22 user agencies.

  - Cost was $361 million in VPBA bonds to build, funded in 2004 and 2005.

  - Annual operating and maintenance budget of $29.6 million, funded through VSP budget (85% GF).

  - Interoperability with other agencies is achieved through Commonwealth Link to Interoperable Communications (COMLINC) and SIRS (Statewide Interdepartmental Radio System) systems.

  - Existing system has been in use for 14 years and reaching end of life (some components were replaced in 2018).

Land Mobile Radio Has Multiple Components to Provide Adequate Range of Transmission

- LMR systems use radio waves to transmit voice and data. Different base stations are connected to a central communications system.

Source: US Government Accountability Office (GAO).

Handheld portable radios - Carried by public safety personnel, tend to have limited transmission range.

Mobile radios - Often located in vehicles, have greater transmission range than handheld portable radios.

Base station radios - Located in fixed positions, such as dispatch centers. Tend to have the most powerful transmitters.

A network - Connects different base stations to the same communications system.

Repeaters – Retransmit audio signals to increase effective range of radios.

STARS is Managed and Operated by VSP with 22 Users

- VSP maintains equipment for STARS agencies from its operating budget.

- STARS Management Group was established previously by executive order in 2002 (reaffirmed in 2011) to provide overall governance.

  - **Chaired by Secretary of Public Safety and Homeland Security.**

  - **Specified duties were:**

    - Review procurements and contracts relating to STARS;

    - Coordinate/assign radio frequency licenses granted in the Commonwealth; and

    - Promote interagency cooperation and coordination in the use of communications resources.

  - **A new directive will be needed from the Governor or General Assembly (G.A.) to resume this group.**

    - G.A. may wish to consider having representation on this group.

STARS User Agencies

Chesapeake Bay Bridge and Tunnel Police	Dept. of Game and Inland Fisheries
Dept. of Agriculture and Consumer Services	Dept. of Health
Alcoholic Beverage Control Authority	Dept. of Juvenile Justice
Capitol Police	Dept. of Military Affairs
Dept. of Conservation and Recreation	Dept. of Mines, Minerals, and Energy
Dept. of Corrections	Dept. of Motor Vehicles
Dept. of Emergency Management	Dept. of State Police
Dept. of Environmental Quality	Dept. of Transportation
Dept. of Fire Programs	Virginia Information Technologies Agency
Dept. of Forestry	Virginia Marine Resources Commission
	Virginia Port Authority
	Buchanan County

$361M Spent to Build System Infrastructure, Purchase Original Equipment

- $361.2 million in Virginia Public Building Authority (VPBA) debt was issued in 2004 and 2005 to build infrastructure and purchase original equipment.

  - Original contract awarded to Motorola.

  - STARS network includes:

    - Two Network Operations Centers;

      - 38 servers, 45 routers, 34 switches, 53 PCs, encryption equipment, and other equipment.

    - Seven Division Communications Centers with dispatch equipment;

    - 96 Tower Sites; and

      - 333 repeaters at 67 sites, 233 Microwave radios, and battery plants.

    - Subscriber Equipment for 5,923 users.

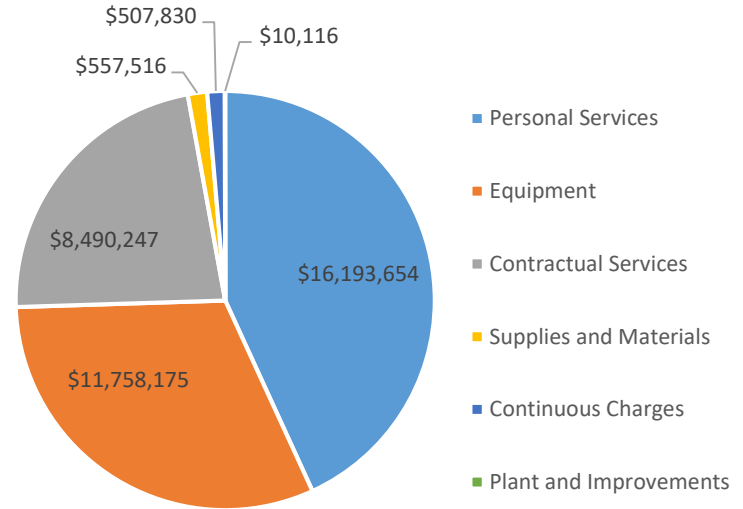   - Vehicular repeaters, mobile radios, portable radios, and mobile data terminals (ruggedized laptops).

Image source: VSP *2016 Facts and Figures.*

Annual STARS Operating Budget is Spent on Personnel, Equipment, and Contractual Services

- VSP expenditures for STARS operations were $37.5 million in FY 2018.

  - **Personal Services supports 131 GF budgeted FTEs and 5 wage employees, including:**

    - 58 Communications Technicians and supervisors, including staff in each of seven Division Communications Centers;

    - 20 FT equipment repair technicians and supervisors;

    - Tower technicians and specialists; and

    - Network Operations Center operators and supervisors.

  - **Electronic equipment was the largest category of equipment expenses.**

  - **"Skilled services" makes up the largest category of contractual services expenditures.**
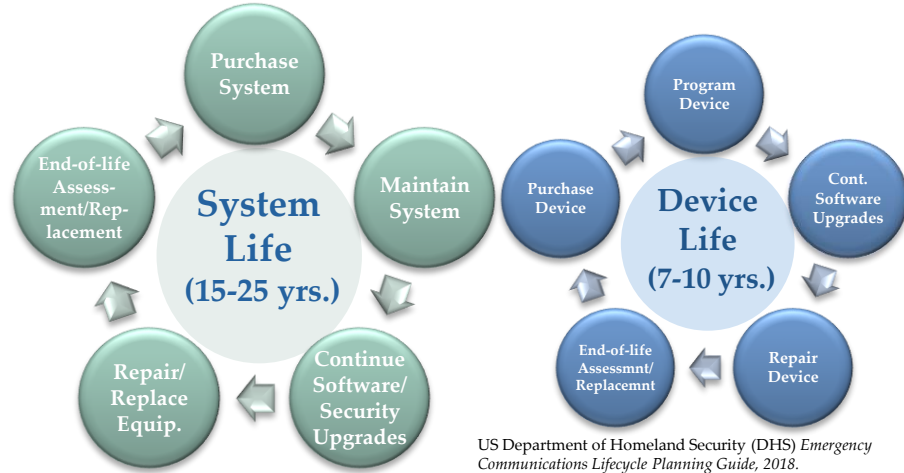
FY 2018 Telecommunications and STARS Service Area Expenditures (Total $37.5 Million)

Pie chart values: $507,830; $10,116; $557,516; $8,490,247; $16,193,654; $11,758,175

Legend:
- Personal Services
- Equipment
- Contractual Services
- Supplies and Materials
- Continuous Charges
- Plant and Improvements

Source: Analysis of Department of Planning & Budget *Expendwise* data.

Service area is positioned within Information Technology Systems, Telecommunications and Records Management program under VSP.

Request of $132.4 Million is to Replace End of Life Devices and Infrastructure

System Life (15-25 yrs.): Purchase System → Maintain System → Continue Software/Security Upgrades → Repair/Replace Equip. → End-of-life Assessment/Replacement

Device Life (7-10 yrs.): Program Device → Cont. Software Upgrades → Repair Device → End-of-life Assessmnt/Replacemnt → Purchase Device

US Department of Homeland Security (DHS) *Emergency Communications Lifecycle Planning Guide, 2018.*

Category		$ in millions
Facilities & Contractors		$4.7
Equipment Installation		4.9
Project Management		6.4
Training		0.2
Network Infrastructure		25.3
Subscriber Devices	Portable Radios ($24.4 million) Mobile Radios ($32.4 million) SIRS Radios ($4.3 million) Vehicular Repeaters ($23.1 million) Fixed Radios ($5.6 million) Other ($1.2 million)	91.0
	Total	$132.4

- Guaranteed spare parts for radios no longer available after December 2018, per Motorola.

  - 2017 budget funded replacement of fixed repeaters, battery power plants, network management platforms, and mobile data terminals (principal value of $9.4 million).

  - Not included: request to upgrade COMLINC is also expected during 2019 session.

VSP Plans to Implement STARS Over Four Years and Procure Products on VITA Statewide Contract

Chart amounts are % of Yearly Total	Year 1	Year 2	Year 3	Year 4
Facilities & Contractors	5%	2%	3%	3%
Project Management	8%	3%	3%	4%
Infrastructure	81%	14%	7%	0%
Subscriber Devices	5%	80%	87%	93%
Estimated Yearly Total* ($ in millions)	$17.5	$42.3	$37.9	$34.7

* These amounts represent a combination of different vendor estimates. Final amounts will be subject to final contract terms.

- Not inclusive of COMLINC costs.

- Total project cost of $132.4 million will be spread over four years.

  - Year 1 is mostly infrastructure and project management.

  - Years 2-4 are mostly devices.

- VITA statewide contract is identified as planned procurement method.

  - Vendor competition may be limited: Over two-thirds of federal agencies use LMR systems/equipment manufactured by Motorola, according to GAO.

  - VITA contract includes several vendors for two-way radios. Only two vendors have been identified by VSP as potentially viable.

Different Models Can be Used to Finance Large Technology Infrastructure Projects

- One-time authorization of debt-financed bonds:
  - Similar approach to 2004/2005 STARS implementation.
  - Requires General Assembly authorization of $132.4 million at one time.
    - Estimated annual debt service: $16.2 million per year.
- Equipment Trust Fund/Phased-Upgrades Model:
  - Certain amount of debt/year authorized on a routine ongoing basis to allow for phased-upgrades.
  - Since VSP has proposed a four-year implementation timeline, this option could allow the Commonwealth to spread the cost over time.
    - Estimated annual debt service: $4.3 million per year for a principal amount of $35 million per year (10-year term).

Virginia's Interoperability Needs Regular Updating

- Virginia and localities invested $650 million from 2001-2013 to increase interoperability (JLARC).

- In order to coordinate state and federal resources, a statewide communications interoperability strategic plan (SCIP) is required by *Code* as well as for federal grants.

- Further defining interoperability and state goals may help inform planning decisions.

  - Previous version of SCIP had defined statewide interoperability as local, regional, and state agencies using interoperable, compatible systems.

  - JLARC, in 2012, studied joint regional procurement of land mobile radio, finding that shared systems can improve interoperability and reduce costs.

Interoperability with Non-STARS Public Safety Agencies Is Achieved Through Various Systems

- Two main approaches to communications interoperability used by public safety community:

Model	Virginia's Systems	
Common Radio System	STARS (22 users, 21 are state agencies)	SIRS (Statewide Interdepartmental Radio System) – Low-band radio system developed in 1977 provides real-time interoperability with localities.
Network patches or "gateways," provide direct interface between disparate radio networks.	COMLINC (Commonwealth Link to Interoperable Communications) is the **current solution to interoperable communications between state agencies and localities** in Virginia. • Cost-effective compared to statewide LMR system. • Strategic vs. tactical: Connection relies on deliberate decision + human intervention (not real time). • State investment also supports direct locality-to-locality communication. • Not consistently used. • Separate funding request to upgrade COMLINC and implement a plan to encourage wider use.	

- **COMLINC vendor has indicated refresh is needed as soon as possible and on an ongoing basis ($9.2 million over 4 years or $25.2 million over 10 years).**

- FirstNet – federal program also known as the National Public Safety Broadband Network – is under development to eventually provide interoperable communications for public safety on the cellular networks.

2019 Session Options to Address Immediate Needs

- Fund Year 1 estimated cost of STARS, consider Equipment Trust Fund Model.

- Engage VITA to recommend optimal procurement method.

- Consider a technical budget amendment to set out STARS operating budget as an independent program to improve visibility of annual funding levels.

- SFC Public Safety Subcommittee will evaluate STARS and COMLINC requests.

Long-Term Options for Consideration

- Routine update of the Statewide Communications Interoperability Strategic Plan.

- Address 2018 APA Findings Related to VSP Procurement.

  - Proper publication of internal procurement policies, proper documentation of sole source procurements, and adherence to certain DGS procurement policies.

- Reconstitute STARS Management Group. Consider broader membership and redefine role.

- Require an in-depth study to examine:

  - Opportunities for shared systems with the state and localities to leverage procurement and improve interoperability.

  - Comparative review of operating and maintenance programs for LMR systems, including costs and staffing levels.

  - An update of 2013 JLARC findings on disaster preparedness planning and federal grant management.

  - Components of Virginia's emergency communications systems, including those that are proprietary.